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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/297,399	04/29/99	MIYAMOTO	M 3404/0F546-U

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EXAMINER

SHOSHO, C

ART UNIT

PAPER NUMBER

1714

13

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/297,399

Applicant(s)
Miyamoto

Examiner
Calle Shosho

Group Art Unit
1714



☒ Responsive to communication(s) filed on Dec 4, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-5 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-5 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 6346014.

The rejection is adequately set forth in paragraph 3 of the office action mailed 8/2/00 and is incorporated here by reference.

In light of applicant's amendment filed 12/4/00, it is further noted that although there is no explicit disclosure that the thickener is associative, given that the thickener swells in an alkaline medium and contains both hydrophobic group and carboxyl group as presently claimed, it is clear that the thickener is inherently associative as presently claimed.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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4. Claims 1-2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura et al. (U.S. 5,580,374) either alone or in view of Doolan et al. (U.S. 5,425,806) and Shay et al. (U.S. 5,478,602).

The rejection is adequately set forth in paragraph 5 of the office action mailed 3/2/00, Paper No.7, and is incorporated here by reference.

With respect to newly added present claim 5, it is noted that while there is no explicit disclosure that the thickeners of Okumura et al. are used in amount of 0.1-2% as presently claimed, it would have been within the skill level of one of ordinary skill in the art to determine how much thickener to add to the ink composition in order to produce an ink which does not clog the pen tip (viscosity too high) and does not lose adequate flow control (viscosity too low).

Therefore, it would have been obvious to one of ordinary skill in the art to choose amounts of thickener, including those presently claimed, in order to control the viscosity of the ink depending on the other ingredients, i.e. water, solvent, etc., present in the ink, the type of instrument in which the ink is to be utilized, etc. and thereby arrive at the claimed invention.

5. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura et al. either alone or in view of Doolan et al. and Shay et al. as applied to claims 1-2 above, and further in view of either Kobayashi et al. (U.S. 4,822,417) or JP54138732.

The rejection is adequately set forth in paragraph 6 of the office action mailed 3/2/00, Paper No.7, and is incorporated here by reference.

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6. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 6346014 in view of either Kobayashi et al. (U.S. 4,822,417) or JP54138732.

The rejection is adequately set forth in paragraph 7 of the office action mailed 8/2/00 and is incorporated here by reference.

Response to arguments

7. Applicants' arguments with respect to the WO 95/10751 reference have been considered and are moot in view of the discontinuation of this reference as applied against the present claims.

8. Applicant's arguments filed 12/4/00 have been fully considered but, with the exception of arguments relating to the WO 95/10751 reference, they are not persuasive.

Specifically, applicant argues that:

(a) The thickeners of JP 6346014 cause thickening by a different mechanism, i.e. they require the presence of an alkali agent.

(b) Primal RM-5 thickener used in a working example of JP 6346014 is distinguished from the thickeners of the instant invention in the present specification.

(c) Comparative data establishes unexpected or surprising results over JP 6346014.

(d) Thickeners disclosed by Okumura et al. are not alkali-swellable associative thickeners.

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With respect to argument (a), it is noted that the present claims only require that the thickener swells in an alkaline medium, not how or why the swelling takes place. Eventhough JP 6346014 discloses adding an alkali agent, while the present invention does not require the use of such an agent, the fact remains that the thickener disclosed by the Japanese reference does in fact swell in an alkaline medium, and thus meets the requirements of the present claims.

With respect to argument (b), it is noted that page 10, lines 4-8 of the present specification discloses that although RM-5 are alkali-swelling thickeners, they have little associative property. However, this disclosure does not state that RM-5 is not associative, rather it states that RM-5 has little associative property. The present claims only require that the thickener is associative, regardless of the degree to which it associates.

Further, applicant has not provided clear and convincing evidence that this portion of the specification refers to Primal RM-5. Another well known associative thickener is Acrysol RM-5. Is this the same as Primal RM-5? Does the disclosure on page 10 of the specification refer to this thickener also? Thus, it is not clear what thickeners are encompassed by RM-5.

With respect to argument (c), it is noted that applicant has provided comparative data, i.e. comparative example 4, which applicant argues shows that an ink which utilizes Primal RM-5 exhibits higher ink seepage and more starving and splitting than inks of the present invention. ✓
However, the data cannot overcome the above rejections, because there is not proper side-by-side

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comparison of inks prepared using thickeners of the present invention versus inks prepared using Primal RM-5. Specifically, comparative example 4 contains 20% thickener, while all the ✓ inventive example use 3-8% thickener. Moreover, the inventive examples 1-8 which use 3, 4, 6, ✓ and 8% thickener are not reasonably commensurate in scope with the scope of the present claims especially, claim 5, which requires 0.1-2% thickener.

In view of the above discussion, applicants' have failed to make a clear and convincing showing of evidence of patentability of the present claims.

With respect to argument (d), applicant argues that the thickeners of Okumura et al. are not associative and point to examples 4 and 7 of Okumura et al. to show that the thickeners produce inks with much lower viscosities than the inks of the present invention.

Firstly, it is noted that none of the present claims require the ink to have a specific viscosity. Further, col.6, lines 47-48 disclose that the ink compositions of Okumura et al. can have viscosities of 50-2000 MPa s. Although none of the examples disclose an ink having viscosities such as those found in the present invention, it is noted that applicant cannot merely rely on the examples and argue that the reference did not teach others." In re Courtright, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967).

Given that the thickener disclosed by Okumura et al. is identical to that presently claimed, i.e. contains hydrophobic group and carboxyl group, and the ink composition disclosed by Okumura et al. is identical to that presently claimed, it is natural to infer, absent clear and

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convincing evidence to the contrary, that the thickener of Okumura et al. would function the same as the thickeners presently claimed, and thus, Okumura et al. remains a relevant reference against the present claims.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie Shosho whose telephone number is (703) 305-0208. The examiner can normally be reached on Monday-Thursday from 7:00 am to 4:30 pm. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

CS.

Callie Shosho

2/15/01

Vasu Jagannathan
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